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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,510	11/26/2003	Terry L. Cooke	HE0209	1833
21495	7590	02/09/2005	EXAMINER	
CORNING CABLE SYSTEMS LLC			LEPISTO, RYAN A	
P O BOX 489			ART UNIT	
HICKORY, NC 28603			PAPER NUMBER	
			2883	

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/724,510

Applicant(s)

COOKE ET AL.

Examiner

Ryan Lepisto

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2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 22-42 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 and 19-21 is/are allowed.
- 6) ☒ Claim(s) 1-4, 8 and 10-13 is/are rejected.
- 7) ☒ Claim(s) 5-7 and 14-18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. The following is a correction to the election/restriction. Specifically, group I is corrected to include only claims 1-21.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-21, drawn to a pulling grip for installing a pre-connectorized fiber optic cable and a furcation plug for attachment to a terminated end of a fiber optic cable, classified in class 385, subclass 135 and 54, respectfully.
- II. Claims 31-42, drawn to a method for installing a pre-connectorized fiber optic cable and a method for loading a pulling grip with fiber optic connectors, classified in class 385, subclass 135.
- III. Claims 22-30, drawn to a furcation plug for attachment to a terminated end of a fiber optic cable, classified in class 385, subclass 54.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product, the pulling grip, can be used in a materially different process of using that product, for example, the pulling grip can be used to store the fibers and housing to protect the fibers from dust and dirt.

Inventions I and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because claims 1, 10 and 19 (the pulling grip) do not have the details of claim 22 (the furcation plug). The subcombination has separate utility such as the secure single fibers together in a ferrule like structure for connection to other fibers or devices.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II and the search required for Group I is not required for Group III, restriction for examination purposes as indicated is proper.

During a telephone conversation with Christopher Dremann on 04 October 2004 a provisional election was made without traverse to prosecute the invention of a pulling grip, claims 1-21. Affirmation of this election must be made by applicant in replying to

this Office action. Claims 22-42 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-4 and 10-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Giebel et al (US 5,863,083)** (Giebel).

Giebel teaches a pulling grip (Figures 1-7) for installing a pre-connectorized fiber optic cable (22) having a terminated end (part of 46) with fiber optic connectors (20) mounted upon the ends of respective optical fibers (18), the pulling grip comprising: a furcation plug (46) attached to the terminated end of a fiber optic cable (part of 46); a pulling grip housing (6) for receiving and temporarily storing the furcation plug (46), the fiber optic connectors (20) and the ends of the respective optical fibers (18); and a pulling grip sleeve (2) comprising a bag (2) that is adapted to be opened to position the pulling grip sleeve(2) over the pulling grip housing (6) and the furcation plug (46) and to be closed around the pulling grip housing (6) and the furcation plug (46) to install the fiber optic cable (22); wherein the pulling grip sleeve (2) is removable from the fiber optic cable (22) once the fiber optic cable (22) is installed (column 7 lines 7-10), wherein the pulling grip housing (6) has a first housing portion (14) that defines an elongate

channel (24) for routing the optical fibers (18) and a second housing portion (16) that defines a plurality of pockets (42) that each store a plurality of the fiber optic connectors (20).

Giebel also teaches a pulling grip (Figures 1-7) for installing a pre-connectorized fiber optic cable (22) having a terminated end with fiber optic connectors (20) mounted upon the ends of respective optical fibers (18), the pulling grip comprising: a furcation plug (46) attached to the terminated end of a fiber optic cable (22), a pulling grip housing (6) for receiving and temporarily encasing the fiber optic connectors (20), the optical fibers (18) and at least a portion of the furcation plug (46), the pulling grip housing (6) having a first housing portion (14) defining an elongate channel (24) for routing the optical fibers (18) and a second housing portion (16) defining a plurality of pockets (42), each pocket (42) for storing a plurality of the fiber optic connectors (20); and a pulling grip sleeve (2) adapted to be positioned over the pulling grip housing (6) and at least a portion of the furcation plug (46), wherein the pulling grip housing (6) is formed by a molded clamshell defining a hinge line (44) that separates the first housing portion (14) and the second housing portion (16) and wherein the first housing portion (14) and the second housing portion (16) are folded about the hinge line (44) to temporarily encase the fiber optic connectors (20), the optical fibers (18) and at least a portion the furcation plug (46), wherein one of the first housing portion (14) and the second housing portion (16) has a lengthwise groove (40) and the other comprises a lengthwise tongue (38) that engages the groove (40) to thereby secure the first housing portion (14) and the second housing portion (16) together in a closed configuration, and

wherein the first housing portion 914) comprises a continuous first flange (34) and a plurality of discontinuous second flanges (32) and wherein the optical fibers (18) are routed lengthwise underneath the first flange (34) and between a pair of adjacent second flanges (34) into one of the pockets (42) (column 5 lines 39-50).

Giebel does not teach expressly a longitudinally zipper openable bag, multiple connectors in each pocket or means for integrating the furcation plug with conventional communications hardware.

Giebel does teach a furcation plug with a similar shape and size as the one taught by the applicant. Furthermore, Giebel teaches the furcation plug being typed down to the pulling grip with ties (50). Since that shape are similar and Giebel teaches a method of integrating the furcation plug with components, it would have been obvious to a person of ordinary skill in the art to use conventional means to secure the furcation plug as taught by Giebel to any needed hardware.

The motivation for doing so would have been to increase flexibility and usability by being able to use the pulling grip in a wide variety of data transmission applications (column 1 lines 10-12 and column 2 lines 22-32).

Also, at the time the invention was made, it would obvious to a person of ordinary skill in the art to have a bag that opens longitudinally with a zipper. Applicant has not disclosed that opening the bag longitudinally with a zipper provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the bag opening and closing with tie means at one end as taught by

Giebel because the bag as taught by Giebel will protect the pulling grip from dirt and is easily removable and since the applicant discloses any well know way of closing the bag is acceptable.

The motivation for doing so would have been increase durability by minimizing damage to the pre-connectorized fiber optic cable during installation (column 2 lines 33-35).

Finally, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to place multiple connectors in each pocket, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 and since Giebel teaches (column 6 lines 9-15) teaches the slot may be of any shape and any number of different connectors can be used.

The motivation for doing so would have been to increase flexibility to allow any number of various types of optical fiber connectors to be used (column 6 lines 14-16).

### ***Allowable Subject Matter***

3. **Claims 9 and 19-21** are allowed. The following is an examiner's statement of reasons for allowance: Claims 9 and 19 are allowable over the prior art of record because the latter, either alone or in combination, does not disclose nor render obvious a pulling grip for installing a pre-connectorized fiber optic cable having a terminated end with fiber optic connectors mounted upon the ends of respective optical fibers, the pulling grip comprising: a furcation plug attached to the terminated end of a fiber optic



cable with a ridge fore engaging a groove to restrain lengthwise movement and rotation; a pulling grip housing for receiving and temporarily encasing the fiber optic connectors, the optical fibers and at least a portion of the furcation plug; and a pulling grip sleeve adapted to be positioned over the pulling grip housing and at least a portion of the furcation plug; wherein the pulling grip housing is formed by a plurality of individual modules connected together by at least one flexible rod, in combination with the rest of the claimed limitations. Claims 20 and 21 are allowable because they are dependent on allowable independent claim 19.

4. **Claims 5-7 and 14-18** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

These claims would be allowable over the prior art of record if rewritten in independent form because the latter, either alone or in combination, does not disclose nor render obvious, a cylindrical wrap that bundles together the fiber optic connectors, a furcation plug rotation restraint means or individual housing modules held together by flexible rods, in combination with the rest of the claimed limitations.

### ***Conclusion***

5. This action contains some changes regarding allowable subject matter from the first action, so this action will be non-final. Specifically, the allowable subject matter has been better stated to eliminate confusion and a new rejection is made. The means for integrating the furcation plug as shown in Fig. 7 would be allowable over prior art is the

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structure is described in proper detail in combination with current independent claims, just citing that the plug has means to integrate to hardware can read upon almost any shaped plug.

**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Lepisto whose telephone number is (571) 272-1946. The examiner can normally be reached on M-F 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ryan Lepisto

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Date: 2/3/05



Frank Font

Supervisory Patent Examiner

Technology Center 2800